Farm Lead

Front End Assessment

<u>Prepared By :</u> Ebuka Beluolisa (Full stack developer , ***hoping to work at FarmLead***).

Introduction:

Hello , I am really thankful for the opportunity to take part in this assessment. I really hope i have been able to impress you with my work , as working for your company and helping FarmLead achieve its goals would be a dream come true.

I have prepared this documentation to explain my thought process throughout this assessment.

Why did I ensure my data was saved as objects rather than arrays?

During my computer science degree , I got really experienced with running times of algorithms , which I have noticed can be easily overlooked.

I decided to store the data of my workouts as Objects. Since I knew that I would have to run find operations on this data. The running of find on an array is O(n) but O(1) on objects. While the data we worked with is not big , it's good practice to keep the potential of growth in mind.

A O(n) on a really big dataset would slow down our algorithm and the application. Which is just bad UX.

How did I handle Accessibility ?

Ensuring a web/mobile app is accessible is very important for a good user experience. I took the following steps to ensure that.

- I wrote media queries to ensure the app looks good on mobile , tablets and laptops.
- I implemented a light/dark theme. This is to allow users to easily adjust it to their preference.

Why did I hesitate to use redux?

In my opinion the use of redux is to prevent prop drilling (passing props down to components who might not use , but just to pass it to it's child) , or when many components are accessing the same state.

This did not happen in the application as it was a rather simple app. So i thought using redux was an overkill.

But after more consideration I implemented redux to store the data of the theme and, the tour status. This is because , if this app should get bigger , chances are that more components will need this data.

I implemented a button that shows this documentation. I also stored the state of if the document is showing or not in the redux store, this is because as this app gets bigger , i may have to show this documentation in different places.

Why did I use *.module.scss stylesheets?

In react all your stylesheets are kind of merged in one. So repeating class names can cause unwanted styling effects. There are many ways to prevent this ,some of which are, to use styled-components, which i did, another is to name the stylesheets "**.module.scss**" and import the styles as classes. Behind the scenes each class name is given a unique id . This ensures there are no unwanted styling effects.

Unit Testing

Using Jest with Enzymes , I was able to write unit tests for some components. Testing is a very important skill , and I wanted to demonstrate my ability to do so.

What i found most challenging

Separation of concerns . I am a strong believer in writing components that only have access to information they need to work . This is what I tried to achieve in this assessment. This way my app is easy to read, test , and scale in the future.